

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A method for controlling a plurality of base stations in a mobile communication system comprising a communication terminal, said plurality of base stations and a control unit connected to said plurality of base stations, the communication terminal being in communication with said plurality of base stations during a soft handover, the method comprising:

receiving a data packet from said communication terminal at said plurality of base stations;

evaluating, for each base station of said plurality of base stations, an uplink channel quality characteristic between said communication terminal and the respective base station,

determining the base station of said plurality of base stations having the best uplink channel quality characteristic as a serving base station, and

controlling some or all base stations having received the data packet from the communication terminal during soft handover and other than the serving base station not to forward the received data packet to said control unit during the soft handover.

2. (Previously Presented) The method according to claim 1, further comprising:

checking data integrity of said received data packet at each of said plurality of base stations, and

transmitting said received data packet and/or a control packet from the respective base station to said control unit, if data integrity of said received data packet was confirmed by a base station controlled to forward said received data packet to said control unit, wherein the control packet acknowledges the correct reception of said data packet.

3. (Currently Amended) The method according to claim 2 [[1]], further comprising: transmitting a notification from the respective base station to said control unit, if data integrity of said received data packet was not acknowledged by a base station, wherein the notification indicates that data integrity of said received data packet was not acknowledged by said respective base station.

4. (Currently Amended) The method according to claim 1, further comprising: checking data integrity of said received data packet at the serving base station, transmitting from the serving base station either the received data packet to the control unit if the data integrity of said received data packet was acknowledged by said serving base station, or a notification indicating that the data integrity of said received data packet was not acknowledged by said serving base station from said serving base station to said control unit, if the data integrity of said received data packet was not acknowledged by said serving base station, wherein ~~the notification indicates that data integrity of said received data packet was not acknowledged by said serving base station.~~

5. (Previously Presented) The method according to claim 4, further comprising:

transmitting by said control unit in response to receiving said notification from said serving base station a status request relating to said received data packet from the other base stations than that selected base station, and

receiving status reports relating to said received data packet from said other base stations, wherein

said status report indicates whether data integrity of said data packet was confirmed at the respective base station or comprises said received data packet.

6. (Currently Amended) The method according to claim 3 or 5, wherein said notification and said status report are transmitted to the control unit in at least one frame protocol control frame or by radio network signaling messages over a wired interface.

7. (Previously Presented) The method according to claim 1, wherein selecting the serving base station is executed by said control unit.

8. (Previously Presented) The method according to claim 1, wherein said selection of the serving base station is periodically triggered by a configurable timer.

9. (Original) The method according to claim 8, wherein said timer value is signaled to said serving base station within a radio link addition function or a combined radio link addition and removal function.

10. (Previously Presented) The method according to claim 8, wherein said timer value is signaled to said serving base station in an information element of a Node B Application Part (NBAP) or Radio Network Subsystem Application Part (RNSAP) radio link setup request message.

11. (Previously Presented) The method according to claim 1, wherein evaluating an uplink channel quality characteristic comprises averaging parameters indicating the uplink channel quality over a configurable time interval.

12. (Original) The method according to claim 11, wherein said time interval is configured by at least one signaling message of a radio resource control protocol or at least one system specific control plane protocol message.

13. (Previously Presented) The method according to claim 11, wherein said time interval is selected taking into account the velocity in a movement of said communication terminal, the signaling delay between said control unit and a base station, and the signaling delay between different control units in the mobile communication system.

14. (Previously Presented) The method according to claim 1, wherein said control unit transmits a selection command to the new serving base station upon selection.

15. (Original) The method according to claim 14, wherein said control unit further transmits the selection command to the previous serving base station.

16. (Previously Presented) The method according to claim 14, wherein the selection command indicates an activation time at which the new serving base station should start forwarding the successfully received data packet, control packets or notifications to said control unit and at which the previous serving base station should stop forwarding the successfully received data packet, control packets or notifications to said control unit.

17. (Original) The method according to claim 16, wherein the previous serving base station and said control unit negotiate said activation time by exchanging control messages.

18. (Previously Presented) The method according to claim 17, wherein said control message is one of a radio link reconfiguration message, an activation time negotiation request message, and an activation time confirmation message of Node B Application Part (NBAP) or Radio Network Subsystem Application Part (RNSAP) protocols.

19. (Currently Amended) A method for controlling a plurality of base stations in a mobile communication system comprising a communication terminal, said plurality of base stations and a gateway interconnecting said mobile communication network to a fixed communication network, the communication terminal being in communication with said plurality of base stations during a soft handover, the method comprising:

receiving a data packet from said communication terminal at said plurality of base stations;

for each base station of said plurality of base stations, evaluating an uplink channel quality characteristic between said communication terminal and the respective base station, determining the base station of said plurality of base stations having the best uplink channel quality characteristic, selecting the determined base station as a serving base station, and controlling some or all base stations having received the data packet from the communication terminal during soft handover and other than the serving base station not to forward the received data packet to said gateway unit during the soft handover.

20. (Previously Presented) The method according to claim 19, further comprising: checking data integrity of said received data packet at each of said plurality of base stations, and

if data integrity of said received data packet was confirmed by a base station controlled to forward said received data packet to said gateway, transmitting said received data packet from the respective base station to said gateway.

21. (Previously Presented) The method according to claim 19, further comprising: if data integrity of said received data packet was not acknowledged by said serving base station, transmitting from said serving base station a status request relating to said received data packet to the other base stations than said serving base station, and

receiving status reports relating to said received data packet from said other base stations,

wherein

said status report indicates whether data integrity of said data packet was confirmed at the respective base station or comprises said received data packet.

22. (Previously Presented) The method according to claim 19, wherein said notification and said status report are transmitted to said serving base station in at least one frame protocol control frame or by radio network signaling messages over a wired interface.

23. (Previously Presented) The method according to claim 19, wherein selecting the serving base station is executed by the current serving base station.

24. (Previously Presented) The method according to claim 1 or 19, wherein said uplink channel quality characteristic is determined based on at least one of a path loss for an uplink channel between said communication terminal and the respective base station, closed loop power control commands transmitted by a base station to said communication terminal, and uplink interference.

25. (Previously Presented) The method according to claim 1 or 19, wherein said selection of the serving base station is independent from uplink data channel air interface transmission.

26. (Previously Presented) The method according to claim 19, wherein said selection of the serving base station is periodically triggered by a configurable timer.

27. (Previously Presented) The method according to claim 19, wherein evaluating an uplink channel quality characteristic comprises averaging parameters indicating the uplink channel quality over a configurable time interval.

28. (Original) The method according to claim 27, wherein said time interval is configured by radio resource control signaling or another system specific control plane protocol.

29. (Previously Presented) The method according to claim 27, wherein said time interval is selected taking into account the velocity in a movement of said communication terminal, and the signaling delay between at least two base stations of said plurality of base stations.

30. (Previously Presented) The method according to claim 19, wherein the current serving base station transmits a selection command to the new serving base station upon selection.

31. (Previously Presented) The method according to claim 30, wherein the selection command indicates an activation time at which the new serving base station should start forwarding the successfully received data packet to a gateway interconnecting the mobile communication network to a fixed communication network, and at which the previous serving base station should stop forwarding the successfully received data packet to the gateway.

32. (Previously Presented) The method according to claim 15 or 30, wherein the previous or current serving base station and the new serving base station continue their serving base station functionality in parallel for a predetermined time period.

33. (Previously Presented) The method according to claim 14 or 30, wherein the selection command is transmitted in an information element of NBAP or RNSAP message.

34. (Previously Presented) The method according to claim 1, wherein the received data packet is transmitted in at least one frame protocol data frame and the control packet and/or the notification is transmitted in at least one frame protocol control frame.

35. (Previously Presented) The method of claim 1 implemented by a base station for use in a mobile communication system wherein a communication terminal is in communication with a plurality of base stations during a soft handover.

36. (Previously Presented) The method of claim 1 implemented by a control unit for use in a mobile communication system comprising a communication terminal, a plurality of base stations and said control unit connected to said plurality of base stations, the communication terminal being in communication with said plurality of base stations during a soft handover.

37 and 38. (Canceled).

39. (Previously Presented) The method according to claim 1, further comprising:

receiving power control commands from said plurality of base stations,
for each base station of said plurality of base stations, the communication terminal
determining a channel quality characteristic related to each base station based on the power
control commands received from the respective base station, and
transmitting said determined channel quality characteristics to said control unit via a base
station, wherein
said determined channel quality characteristics are considered by said control unit or said
serving base station to select a serving base station.

40. (Original) The method according to claim 39, wherein determining said channel
quality characteristic for each base station comprises combining said power commands received
from the respective base station over a configurable time period.

41. (Previously Presented) The method of claim 39 implemented by a communication
terminal for use in a mobile communication system comprising the communication terminal, a
plurality of base stations and a control unit connected to said plurality of base stations, the
communication terminal being in communication with said plurality of base stations during a
soft handover.

42. (Currently Amended) A mobile communication system comprising a
communication terminal according to claim 41, a plurality of base stations and at least one
control unit connected to said plurality of base stations, the communication terminal being in
communication with said plurality of base stations during a soft handover, said plurality of base

stations comprising at least one base station which comprises a section that implements a method comprising:

receiving a data packet from said communication terminal at said plurality of base stations;

for each base station of said plurality of base stations, evaluating an uplink channel quality characteristic between said communication terminal and the respective base station,

determining the base station of said plurality of base stations having the best uplink channel quality characteristic,

selecting the determined base station as the serving base station, and

controlling some or all base stations having received the data packet during the soft handover and other than the serving base station not to forward the received data packet to said control unit during the soft handover.

43. (Currently Amended) A mobile communication system comprising a communication terminal according to claim 41 and a plurality of base stations, the communication terminal being in communication with said plurality of base stations during a soft handover, said plurality of base stations comprising at least one base station which comprises a section that implements a method comprising:

receiving a data packet from said communication terminal at said plurality of base stations;

for each base station of said plurality of base stations, evaluating an uplink channel quality characteristic between said communication terminal and the respective base station,

determining the base station of said plurality of base stations having the best uplink channel quality characteristic,

selecting the determined base station as the serving base station, and

controlling some or all base stations having received the data packet during the soft handover and other than the serving base station not to forward the received data packet to said control unit during the soft handover.